U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE November 26, 1969 Vol. XXI, No. 24

NATIONAL INSTITUTES OF HEALTH

Dr. Marvin Dunn Named Chief of DERF Branch

Dr. Marvin R. Dunn has been named chief of the Physician Education Facilities Branch of the Division of Educational and Research Facilities, Bureau of Health Pro-

fessions Education and Manpower Training.

Dr. Dunn comes to the Division from the Woman's Medical College of Pennsylvania, where since 1965 he has served as both associate dean and associate pro-



Dr. Dunn

fessor of Pathology.

He will plan, direct, and coordinate the construction grants program for schools of medicine and osteopathy. Such facilities are needed to provide space for increased enrollments to meet growing health manpower needs.

A native of Texas, Dr. Dunn received his B.A. degree from Hardin-Simmons University, and his M.D. from the University of Texas Southwestern Medical School.

He was in the PHS Commissioned Corps from 1957 to 1959. During this period he was medical officer-in-charge of a cytology research project jointly sponsored by the National Cancer Institute and the Woman's Medical College of Pennsylvania.

Last year Dr. Dunn was chairman of a task force to increase recruitment and enrollment of students from minority groups for six Philadelphia schools of medicine.

In 1962 Dr. Dunn received the Christian R. and Mary F. Lindback Award for Distinguished Teaching.

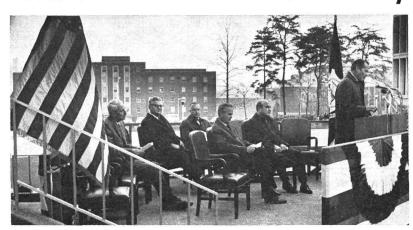
Drs. Baker and Layton Named NLM Regents

The Presidential nominations of Drs. William O. Baker, and Jack M. Layton to the Board of Regents, National Library of Medicine, have been confirmed by the Senate.

They have been appointed for 4-year terms and will replace Dr. Stewart G. Wolf and Dr. William B. Bean, whose terms of office expired in August 1969.

Dr. Baker, vice president in charge of research, Bell Telephone

HEW Sec. Finch Dedicates Newest NIH Research Facilities at Nov. 18 Ceremony



HEW Secretary Finch delivers address dedicating Bldgs. 36 and 37. On the podium may be seen (I to r): Dr. John C. Eberhart, Director of Intramural Research, NIMH; Dr. Edward F. MacNichol, Jr., NINDS Director; Dr. Carl G. Baker, Acting NCI Director; Dr. Marston, and the Reverend LeRoy G. Kerney.—Photos by Tom Joy and Ralph Bredland.

Secretary of Health, Education, and Welfare Robert H. Finch dedicated the two newest NIH laboratory facilities—Research Buildings 36 and 37—at ceremonies held Nov. 18 before an audience of more than 500 invited guests.

In his dedicatory address, Mr. Finch lauded NIH research efforts, noting that "you . . . have earned what every group of professionals covets most and that is the reputation for excellence." He added, ". . . your reputation can only be enhanced, if that is possible, by these gleaming new facilities."

While acknowledging the benefits derived from research, Mr. Finch indicated that health care, as well as other Federal services, were up for reexamination and reassessment.

"We have hard, even agonizing choices to make," he declared. "They involve trade-offs that no one wants to make . . . emphasizing one good at the cost of another. But in this period of budget stringency, such choices must be made—and limited resources must be targeted accordingly."

Laboratories, Murray Hill, N.J., is a recognized leader in the field of communications.

Dr. Layton, professor and head of the Department of Pathology, University of Arizona, College of Medicine, is a distinguished scientist-educator.



Dr. Marston welcomes guests prior to introducing Mr. Finch.

In matters relating to the health field, the Secretary said "we must . . . begin to transform an uncoordinated array of medical resources into effective health-care delivery systems."

However, the overall momentum of research efforts "must and will be maintained—there simply is no room for question about that," Mr. Finch noted. "We are so close to many possible breakthroughs."

(See CEREMONY, Page 5)

Cell Biochemical, Physical Variations May Explain Cancer-Causing Process

Newly discovered biochemical and physical differences between the membranes of normal and malignant cells have been reported by NIH scientists. Such differences may help elucidate the process of cancer causation.

The study was undertaken by Dr. Peter T. Mora and Vivian W. McFarland, National Cancer Institute, and Dr. Roscoe O. Brady and Roy M. Bradley, National Institute of Neurological Diseases and Stroke. It was reported in the Proceedings of the National Academy of Science.

The findings resulted from research on the influence of a tumorcausing virus on both the chemistry of cell membranes and the ability of these cells to produce tumors when injected into laboratory animals.

Chemicals in Membrane Change

Attention focused on changes in the amount of certain chemicals in the cell membrane, particularly large molecules called gangliosides.

Gangliosides, when present on the cell surface, may influence such factors as the surface charge and adhesiveness of the cell.

These in turn could influence the mutual control of division of cells when in contact with one another ("contact inhibition"). One distinguishing feature of cancer cells is their lack of contact inhibition and their abnormal and uncontrolled division.

Cell Line Also Studied

The scientists used SV40 virus (a monkey DNA virus) to infect a mouse cell line derived from a strain of inbred mice and another derived from randomly bred mice.

A cell line that showed spontaneous transformation (not induced by virus) in tissue culture was also studied.

The cell membranes of both types of virally transformed cells showed a marked reduction in the amount of two specific gangliosides. No such decrease was seen in the spontaneously transformed cells.

The physical growth pattern of the virus-transformed cells in tis-

(See CELL, Page 5)



Published biweekly at Bethesda, Md., by the Publications and Reports Branch, Office of Information, for the information of employees of the National Institutes of Health, Department of Health, Education, and Welfare, and circulated by request to interested writers and to investigators in the field of biomedical and related research. The content is reprintable without permission. Pictures are available on request.

The NIH Record reserves the right to make corrections, changes or deletions in submitted copy in conformity with the policies of the paper and the Department of Health, Education, and Welfare.

NIH Record Office Bldg. 31, Rm. 2B-03. Phone: 49-62125

Editor Frances W. Davis
Assistant Editor Fay Leviero

Staff Correspondents

Bari Attis, NINDS; Robert Avery, NCI; Lloyd Blevins, NICHD; Thomas Bowers, CC; Katie Broberg, NIAMD; Art Burnet, HMES; Helene Doying, DRR; Florence Foelak, BEMT/OD; Sue Hannon, NIDR; Marjorie Hoagland, NIMH; Elizabeth Y. James, NIEHS; Paul Kelly, NLM; Robert Knickerbocker, DRS; Laura Mae Kress, DAHM; Betty Kuster, DCRT; Evelyn Lazzari, DN; Jan Logan, FIC; Carolyn Niblett, DDH; Marion Oakleaf, DRG; Faye Peterson, DBS; Richard Schroder, ADA; Anne Tisiker, NHI; Pat Vienna, NIAID; Wanda Warddell, NIGMS; Beverly Warran, DERF; Eleanor Wesolowski, DPM.

Jack Leach Is Chairman Of Safety Section, NSC

John R. Leach, NIH safety officer, was recently elected chairman of the Research and Development Safety section of the National Safety Council.

The Council, the world's largest safety organization, actively promotes accident prevention within industry.

The new section will identify and evaluate hazards in research activities, recommend procedures to overcome these hazards, and provide information on safety to scientists and those working in the field of safety professions.

Mr. Leach came here in 1960 as assistant chief of the Plant Safety Branch. He is responsible for accident and fire protection programs throughout NIH.

Moratorium Committee Sponsors Two Events

The Viet Nam Moratorium Committee at NIH/NIMH sponsored two events on the NIH reservation during November.

Participants in a Viet Nam Memorial, held Nov. 13, at noon, in front of Bldg. 1 included the Reverend Channing E. Phillips and Dr. Mark Levinthal.

A brief history of Viet Nam was presented on Nov. 14, at noon, in Bldg. 1, Wilson Hall.

A panel presentation and group discussion was led by Susan Berger and associates from the Johns Hopkins School of Advanced International Studies.

NIH Television, Radio Program Schedule

Television

NIH REPORTS

WRC, Channel 4 New series begins January 1970

Radio

DISCUSSION: NIH

WGMS, AM-570—FM Stereo 103.5—Friday evenings— About 9:15 p.m.

November 28

Dr. Milo D. Leavitt, Jr., FIC Director

Subject: Fogarty Center Role in NIH International Activities

December 5

Dr. Frank T. Falkner, associate director, Program Planning and Evaluation, NICHD

Subject: Infant Mortality

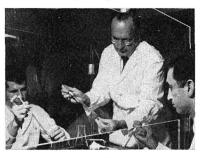
Interview takes place during intermission, Library of Congress Chamber Music Series.

250 Student Nurses Visit CC, Tour Facility, Attend Lectures

About 250 student nurses and nursing school faculty members recently visited the Clinical Center in conjunction with Nursing Student Day.

The event, held twice yearly, provided an opportunity for students to learn about activities in a research hospital. Six CC nursing services gave lectures and conducted tours.

Lab Personnel Offered Demonstrations, Lectures On Safety Pipetting



Dr. John J. Farmer III (I) and Narbik Karamian (r) observe Dr. Irwin demonstrate safety pipetting in a plexiglass simulated hood.

A series of lectures and demonstrations on safety-pipetting was recently given by the Environmental Services Branch, Division of Research Services, as part of its Biological Control Program.

The purpose of the series is to make people aware of the dangers of infection caused by ingestion of pathogenic microorganisms through mouth pipetting.

It was also shown that aerosol generation by improper pipetting contaminates personnel.

Before the lecture different types of pipetting devices were evaluated. In this evaluation safety cabinets and laminar downflow hoods were used; both are now being used more frequently in the laboratory.

Later, lecture participants practiced using pipetting devices with safety cabinets and simulated laminar downflow hoods.

Laboratory personnel from NCI, NIAID, and NHI have so far attended the lectures. Laboratory supervisors may confer with the lecturer in order to stress the discussion that will be of most value to their respective institutes.

For further information call Dr. John Irwin, Ext. 66171 or Roger DeRoos, Ext. 66035.

Two CC Nurses Retire From Federal Service

Two nurses who will be missed, are retiring from the Clinical Center.

Irma Monlux, chief training officer, Education and Training Unit, CC Nursing Department, and Katherine Finn, administrative nurse supervisor, will both retire on Nov. 30.

Joint Party Given

A joint party was given for them—the number of guests who attended attested to their popularity.

Miss Monlux, an officer in the PHS Commissioned Corps with the rank of nurse director, taught for many years before joining the CC nursing staff in 1962, as an instructor.

She was appointed chief training officer in 1964, responsible for the training of all new CC Nursing Department personnel.

Miss Monlux earned her R.N. degree from Kahler Hospital School of Nursing, and her B.S. degree in Nursing Education from the University of Minnesota. On her retirement she will live in Arizona.

Miss Finn joined the CC nursing staff in 1957. Her responsibilities included ensuring proper nursing coverage for the CC as well as handling many departmental problems.

Served With Marine Hosp. Service

She was a member of the U.S. PHS in the late thirties and forties, at that time it was called the U.S. Marine Hospital Service.

Miss Finn received her R.N. degree from Saint Catherine's Hospital, Omaha, Neb.—her home state. She has a B.S. degree in Nursing from Creighton University, and an M.S. degree from the University of Omaha.

She plans to make her home in Omaha.



During their retirement party Katherine Finn (I), and Irma Monlux (c), receive best wishes from Geraldine L. Ellis, assistant chief, CC Nursing Department. Both will head west, Miss Finn will live in Omaha where the winters are cold—Miss Monlux will reside in sunny Sun City, Ariz.

CFC at NIH Reaches 96.9 Percent of Quota: One More Report Due

As the Combined Federal Campaign here ended on Nov. 20-with one final report due-collections at NIH had reached 96.9 percent of its goal, \$184,077.97.

Dr. Theodore Cooper, Director of the National Heart Institute and CFC Chairman, expressed appreciation that "a tremendous job has been done here at NIH in behalf of this important drive."

He added, "Congratulations to all the staff and a 'well done' to all the keymen. A sense of sharing has been achieved through the generosity of NIH employees."

Eight of the participating units have exceeded 100 percent of their quota as reported Nov. 14:

		Amount
Unit	Percent	Pledged
FIC	191.0	\$1,778.00
NIEHS	165.1	1,129.00
NIGMS	136.5	5,420.00
NICHD	134.1	7,848.50
BEMT	118.1	18,778.83
NLM	114.9	9,301.00
DRG	110.8	11,007.10
NIDR	106.8	6,815.98
Other contrib	utions coll	ected thus

far:

I CUI		
OD/ADA	98.0	29,384.90
CC	83.0	12,563.15
DBS	94.6	4,351.75
DCRT	88.6	4,931.00
DRS	93.7	8,030.55
NCI	80.2	21,391.65
NEI	69.8	981.50
NHI	93.3	10,551.38
NIAID	92.6	7,953.85
NIAMD	88.3	13,141.73
NINDS	73.7	8,718.10

Several components within BEMT have exceeded their quota, as the BEMT report on Nov. 12 indicates:

odoto D	161.0	4,110.00
$\mathrm{D}\mathbf{A}\mathbf{H}\mathbf{M}$	130.0	1,452.00
DDH	103.0	3,119.58
DERF	103.0	2,138.00
DHMES	150.0	2,150.00
DN	109.0	2,786.50
DPM	96.0	1,071.50
DRR	91.0	1,875.25

Schedule for NIH-Airport **Buses Subject to Change**

For current information on the daily bus service schedule between NIH and Dulles and National Airports, employees should contact the Bldg. 31 Receptionist, Ext. 66320.

Greyhound Airport Service has stated that it may be necessary, on short notice, to change the schedule previously announced in the NIH Record (Sept. 30, 1969).

However, Greyhound buses will continue to pick up and deliver at Buildings 10 and 31A, POSB reports.

Husband-Wife Team in NIAID Wins 1969 Minority Group Census Gorgas Medal for Distinguished Research To Aid Trend Analysis





Dr. Patricia Webb and Dr. Karl Johnson have first-hand knowledge of the Machupo virus which causes Bolivian Hemorrhagic Fever-they both contracted the disease. The investigators won their award for ". . . excellence of work . . . difficult nature of the diseases they seek to eradicate . . . devotion to their mission.'

The 1969 Gorgas Medal has been presented to Dr. Karl M. Johnson and Dr. Patricia A. Webb, a husband-wife team of biomedical research scientists with the National Institute of Allergy and Infectious Dis-

eases's Middle America Research Unit in the Panama Canal Zone.

Dr. Johnson and Dr. Webb received the medal for "the excellence of their work, for the difficult nature of the diesases they seek to eradicate, and for devotion to their mission." It was given to them at the annual meeting of the Association of Military Surgeons of the U.S. held Nov. 16-19 in Washington, D.C.

Mary Tully, Affiliated With GS. Inc. and NIH. Dies of Heart Attack

Mary Dani Tully, a clerk in the Printing and Reproduction Section, Plant and Office Services Branch, ODA, died suddenly on Nov. 13 after a heart attack in her Chevy Chase home.

Since last spring Mrs. Tully had performed clerical and statistical work for the Production Unit.

For 3 years prior to her employment at NIH, Mrs. Tully worked for Government Services, Inc., most of the time in Bldg. 31.

A great number of NIH employees with whom she came in contact during this period remember her cheerful manner and the genuine interest she expressed in everyone

Mrs. Tully is survived by three daughters, Martha Tully and Mrs. Harry Hamilton, of Washington, and Mrs. Harry Sterling, of Rockville; two sons, Andrew F., of New York, and Mark M., of Chevy Chase, and her mother, Mrs. Judith Dani. two sisters and one brother, all of Southbridge, Mass.

The family requests that expressions of sympathy be in the form of contributions to Children's Hospital, 2125 13th St. N.W., Washington, D.C.

The Gorgas Medal was established in 1942 in memory of Major Gen. William C. Gorgas whose work in preventive medicine made possible the construction of the Panama Canal. It is presented annually the association for distinguished work in preventive medi-

Dr. Johnson was among the MARU staff members who, in 1963, began studying an epidemic of an unknown disease-which he later contracted—in San Joaquin, a northeast Bolivian community.

He took part in a number of expeditions and helped set up a clinical pathology laboratory in the town's hospital, and a field labora-

Named to Bolivian Commission

He was later named to a commission established in cooperation with the Bolivian Ministry of Health under the sponsorship of the Pan American Health Organization.

During one expedition, the etiologic agent of the disease-named Machupo virus after the river on which San Joaquin is located—was isolated from the spleen of a 2vear-old boy.

A study of this agent and several other isolates was undertaken at the MARU headquarters late in 1963.

At MARU, Dr. Webb-who had contracted the disease from her husband-was able to carry on important laboratory studies as well as participate in field laboratory procedures near the epidemic site.

As a result of their work, the MARU investigators recovered strains of Machupo virus-the cause of Bolivian Hemorrhagic Fever—from the rodent Calomys callosus; later, the virus was iso-(See NIAID TEAM, Page 4)

Scheduled for HEW

HEW is taking steps to make equal employment opportunity a reality by updating statistics on minority group employment.

A recent change in Civil Service Commission policy allows the Department to include a record of minority group designations in its computer system when this information is maintained separately from all other records.

The data will be available for use only by the Equal Employment Opportunity staff.

By combining the record of minority group identification with information available from computerized personnel records, EEO officials will be able to obtain datasuch as rates of promotion and concentration of minority groupswhich will enable them to analyze trends and propose corrective ac-

In order to obtain the information needed for this new computer record, NIH supervisors are being asked to identify the racial groups of their subordinates.

Data Sent to EEO Officer

The data on all full-time employees as of Nov. 30 will be sent directly from supervisors to the Equal Employment Opportunity Officer.

Once this information has been placed on computer tapes, the original records will be destroyed. The tapes, under the control of the EEO officer, will be used only for preparation of statistical reports which he will authorize.

In no case will the race of individual employees be identified by name either on the computer tapes or in any of the reports.

Questions about this procedure should be directed to Dr. Colvin L. Gibson, the Equal Employment Opportunity Officer at NIH, Ext. 66301.

New Self Service Store To Open in Building 35

A new Self Service Store, located in Bldg. 35, Rm. B-313, will open on Tuesday, Dec. 2. The store, the third on the reservation operated by the Supply Management Branch, OAS, will be opened Monday through Friday, from 9:30 a.m. to 3:30 p.m.

The store will carry a complete line of office supplies, a variety of laboratory, photographic, surgical and housekeeping material, and a selection of nontoxic, nonflammable chemical items.

A Charge Plate, authorized by area administrative officers, is essential in order to make purchases in the three SMB Service Stores.



Wilson Hall in Bldg. 1 was a busy place on Nov. 4 when 24 volunteers assembled 67,500 pamphlets on the Federal Employees Health Benefit Program under the direction of Margaret O'Brien, OPM. Envelopes, containing revised brochures on the three general health plans plus an instruction booklet, were distributed to all NIH employees. The "Open Season" for entering plans or changing health benefit enrollments ends Nov. 28.

NLM Phototypesetter GRACE, Fastest In Nation in '64, Joins Other Relics

Only 5 years ago, GRACE was the fastest, most sophisticated phototypesetter in the Nation, now it is a historical relic. GRACE (Graphic Arts Composing Equipment) is joining other prototype systems in the

antique and historical printing collection of the Smithsonian Institution.

Development of this first highspeed computer-driven phototypesetter was sponsored by the National Library of Medicine.

In the early 1960's, the NLM entered the computer age with its MEDLARS (Medical Literature and Analysis Retrieval System). By 1964 high-speed computers which store biomedical information on tapes were operational.

However, in 1962, storing references in computers posed to the Library the problem of how to compose and distribute this information in legible printed form with the utmost speed. Computer printouts available at that time required many pages of the single, large type size.

The Library contracted for the development of a computer-driven photocomposition device with various type fonts and print sizes. The result was GRACE, developed by the Photon Corporation.

Operated at Rapid Rate

GRACE operated at the rate of 300 characters, or 3600 words per minute. GRACE was 5 times faster than any previous mechanical phototypesetter. Unlike the standard single-font computer printouts, GRACE used 3 fonts of type in 6, 10, and 14 point size, both upper-and lower-case.

The 3 fonts contained a total of 226 characters, including special characters such as diacritical marks for certain foreign languages. It was estimated to have the power equipment of 55 linotype operators.

In 1964 GRACE replaced a Hon-

NIAID TEAM

(Continued from Page 3)

lated from the urine of naturally infected Calomys in San Joaquin.

A rodent control campaign, aimed primarily at Calomys, was started in San Joaquin and resulted in a rapid and complete halt of the BHF epidemic.

However, work on a vaccine as a prophylactic measure is continuing at the MARU, since rodent control and maintenance of strict sanitary techniques are costly and the potential for another epidemic is always present.

The researchers also compared the clinical manifestations of BHF to those of hemorrhagic fevers in southeast Asia. They developed techniques for predicting future epidemics and measuring antibodies against the group of viruses to which this virus belongs.

Dr. Johnson joined NIAID in 1958. After serving in the Laboratory of Infectious Diseases in Bethesda, he went to the MARU in 1962 and became its director in 1964. Dr. Webb joined the MARU staff in 1963 and was appointed an officer of the PHS Commissioned Corps in 1966.

Dr. Johnson received his B.A. from Oberlin College and his M.S. and M.D. from the University of Rochester.

In 1964 he received the Order of the Condor from the government



Dr Kenneth M. Endicott (I), until recently Director of NCI and now BEMT Director, receives the ACS National Award from Dr. Sidney Farber, retiring President. Dr. Endicott was cited for his imaginative leadership and administration of "the largest cancer research endeavor in the world, the National Cancer Institute; and for his dedicated service to the American Cancer Society . . ."

of Bolivia for his work with Bolivian Hemorrhagic Fever.

Last September, and also in 1965, he was in Russia serving as a member of the U.S. delegation on hemorrhagic fevers.

Dr. Webb received her B.A. from Agnes Scott College and her M.D. from the Tulane University School of Medicine.

From 1955-61, she was assigned to the Army Medical Research Unit in Kuala Lumpar, Malaysia. In 1958 she was a participant in the First Asian Regional Pediatric Congress which was held in Singapore.

Both researchers belong to the American Society of Tropical Medicine and Hygiene, and the Microbiological Society of Panama.

Federal Society Honors Four Artists From DRS

Four employees in the Medical Arts and Photography Branch, Division of Research Services, won awards from the Society of Federal Artists and Designers at its annual awards banquet.

eywell on-line printer and printed

the August issue of Index Medicus.

It was a 609-page document con-

taining 13,733 different citations

from biomedical journals for a to-

(See GRACE, Page 8)

Elaine Hamilton won first place in design of large exhibits, also an honorable mention.

Charles R. Gailis won second

place in black and white still photography and an award for excellence for another entry.

Linda Brown received an honorable mention in graphic design, and Walter Ashe, an honorable mention for his exhibit design.

The exhibit of Federal Artists' work is scheduled to be shown at NIH in December.



Charles C. Shinn (I), MAPB chief, looks on as members of his staff are honored by the Society of Federal Artists and Designers. James Spry, Executive Assistant to the Civil Service Commissioner, presents awards to Elaine Hamilton, Charles R. Gailis, and Linda Brown. Walter Ashe was not present for the picture. Ronald B. Winterrowd (third from left), chief, General Illustration Section, also attended the presentation.

BEMT Booklet Updates Health Manpower Facts

A new publication, Health Manpower Source Book (Section 20), has recently been issued by the Bureau of Health Professions Education and Manpower Training.

The booklet presents statistics on the education and supply of health manpower and updates facts that are covered in earlier BEMT publications.

Trends in the number of schools, students, and graduates in such health professions as medicine and osteopathy, dentistry, optometry, pharmacy, and podiatry are included in the pamphlet.

Single copies of the booklet identified as Public Health Service Publication Number 263, Section 20, are available without charge from BEMT, 9000 Rockville Pike, Bethesda, Md. 20014.

Multiple copies may be bought at \$1.75 each from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

Dr. Kohls Retires; Spent Federal Career at RML

Dr. Glen M. Kohls, a scientist at the Rocky Mountain Laboratory in Hamilton, Mont., a part of the National Institute of Allergy and Infectious Diseases, has retired after 40 years as a medical entomologist.

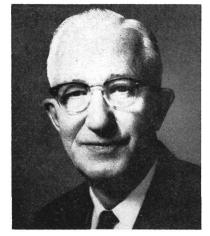
Dr. Kohls, a member of the PHS Commissioned Corps, is internationally recognized for his research in the classification and biology of ticks.

Under his direction, the RML tick collection has developed into one of the world's largest and most complete. It contains over 600 species collected from all over the world.

Dr. Kohls was awarded an Honorary D. Sc. degree by Montana State University, his alma mater, in 1967. He received his M. S. degree from the University of Minnesota. In 1969 he was the recipient of the HEW Meritorious Service Medal.

He is the author of 166 publications and, since 1955, has served as assistant editor of the *Journal of Parasitology*.

Dr. Kohls has served as both



Dr. Kohls is a distinguished parasitologist who is internationally known for his research.

vice-president and president of the International Northwest Conference on Diseases in Nature Communicable to Man.

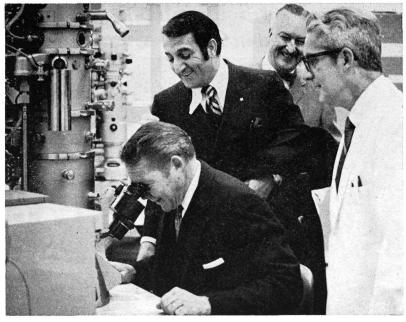
In 1963 he was elected a Fellow of the American Association for the Advancement of Science.

With the exception of his World War II military service with the U. S. Typhus Commission, Dr. Kohls has spent his entire professional career at RML.

Dr. Murray on NIAMD Council

Dr. Donald S. Murray, Assistant for Federal Relations to the President of the University of Pennsylvania, has been appointed to the National Advisory Arthritis and Metabolic Diseases Council.

Recently, he was also appointed to serve on the NINDS Program Project Committee.



Secretary Finch peers through an electron microscope to view a viral specimen as comedian Danny Thomas looks over his shoulder during a tour of labs in Bldg. 37. At right are Dr. Baker and Bolivar J. Lloyd, Jr., NCI biologist.

CEREMONY

(Continued from Page 1)

"At the same time, we intend to develop new programs and to build a new thrust into ongoing programs that will begin to resolve the manpower crisis, and at the same time reinforce our investments with respect to facilities.

"I am honored to dedicate these two new facilities," Mr. Finch concluded, "and to pledge every effort to sustain the high criteria of biomedical research at NIH."

Dr. Marston Welcomes Guests

Dedication participants and guests were welcomed by Dr. Robert Q. Marston, NIH Director. In his opening remarks, Dr. Marston recalled the words of Francis Bacon 350 years ago in his call for scientific experimentation.

"It is in this spirit that we come to dedicate these buildings today," Dr. Marston said. "They are entirely dedicated to the investigation of 'this very world,' and they will bring new devices to extend the human mind—devices such as Bacon never dreamed of in his 'New Atlantis.'

"They will also take advantage of the multidisciplinary approach—something else never dreamed of by the great 'morning star' of today's scientific world.

"And in these ways they will materially strengthen the base of fundamental knowledge of things that, we hope and believe, will contribute to the gradual alleviation of human suffering and to improvement in the quality of life for all men and for all times."

At the conclusion of the ceremonies, Mr. Finch, accompanied by Dr. Marston and distinguished guests, toured laboratories in both facilities.

Among the guests was comedian Danny Thomas, a member of the National Advisory Cancer Council, which was meeting at NIH. The National Advisory Council on Neurological Diseases and Stroke also was in session. All members of both councils attended the ceremony.

The new structures together contain 500,000 square feet of floor space and will house almost 1,600 scientists and other personnel. Scientists there will concentrate on basic investigations related to cancer, neurological diseases and stroke, and mental health.

The dedication opened with a presentation of the Colors by the 8-member Military District of Washington's All-Services Color Guard and the playing of the Star Spangled Banner.

Rev. LeRoy G. Kerney, chief of the Spiritual Ministry Department, Clinical Center, pronounced the invocation and benediction.

Guests were entertained by several musical selections played by the Walter Johnson High School Band, directed by Gilbert Muir.

CELL

(Continued from Page 1)

sue culture was also more crowded than that of normal cells, presumably due to a viral-induced change in contact inhibition.

The spontaneously transformed cells grew only somewhat more thickly than normal.

No tumors were produced in inbred mice after inoculation with the virus-transformed cells, except in those mice whose immunologic competence had been destroyed by irradiation.

This suggests that a specific transplantation antigen was present on the cell surface of virally transformed cells which was recognized and rejected by the immune system of normal animals.

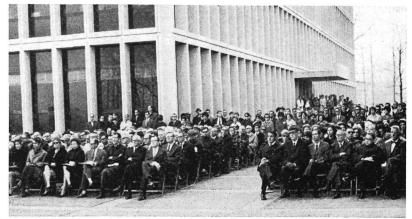
Scientists Investigate Changes

Currently the scientists are investigating how the changes in the cell's surface and the appearance of the transplantation antigen induced by the SV40 virus are related to the decrease in the gangliosides.

Thus, viral transformation may serve as a model to explain many of the observed differences between normal and malignant cells and hold the key for the eventual understanding of the cancer process.



Eight members of the Military District of Washington's All-Services Color Guard march up the aisle prior to presentation of the colors.



A number of distinguished members of advisory councils and other notable guests are in evidence in this partial view of the audience at the dedication.

Dr. Seegmiller Receives Philip S. Hench Award For Research on Gout

Dr. J. E. Seegmiller, who recently retired from the National Institute of Arthritis and Metabolic Diseases, has received the Philip S. Hench Award for outstanding

contributions to research on gout and related disorders.





The award, presented by the Association of Military Surgeons of the United States, consists of a plaque and a \$500 honorarium.

Dr. Seegmiller was recognized for his "exemplary leadership and outstanding contributions to the understanding of purine metabolism, gout, Lesch-Nyhan disease, and other related hereditary metabolic disorders."

Dr. Seegmiller joined NIAMD in 1952 and has devoted his interests to clinical and biochemical investigations of genetically determined human diseases.

Advances Understanding

This research has led to dramatic advances in understanding many hereditary diseases as well as to new concepts of metabolic and chemical approaches to the study of disease.

He has elucidated the biochemical basis of acute attacks of gouty arthritis and the mechanism of colchicine's action in alleviating painful episodes in patients. He has also demonstrated how allopurinol combats gout.

His clinical evaluation of the newer uricosuric drugs paved the way for their acceptance by phy-

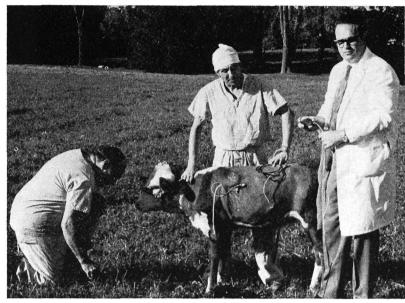
In addition, his demonstration of the absence of an essential enzyme in Lesch-Nyhan disease led to a new approach to gout research. He pointed out that some patients with gout may have a partial deficiency of this enzyme.

In 1968 Dr. Seegmiller received the Gairdner Foundation annual achievement award, and in 1969 he was given the PHS Distinguished Service Medal.

The Hench award, named after the recipient of the 1950 Nobel Prize in Medicine, has now been given twice to an NIAMD scientist. The winner of the first award, given in 1966, was Dr. Leon Sokoloff, chief of NIAMD's Section on Rheumatic Diseases.

The average age of the nation's 26,656,000 veterans is 44.2 years, according to V.A. figures.

Four Different Booster Heart Systems— Two Implanted in Calves—Shown by AHP

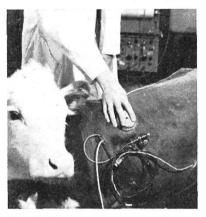


Dr. Lowell T. Harmison (r), assistant chief of NHI's Artificial Heart Program, and technicians with the calf, "Butterball," who seems to enjoy her respite from the laboratory scene. Components of the system implanted in Butterball have been tested individually in previous animal trials, but only recently have all subsystems been combined to function in the same animal.

Four different and completely implantable circulatory assist "booster heart" systems, and calves in which two of the systems have been implanted, were shown last week by the National Heart Institute's Artificial Heart Program.

This is the first time that the various electronic, hydraulic, and thermal components have been brought together as complete functioning systems.

However, the subsystems had been tested individually in previ-



Hand-held primary coil transmits electrical energy to implanted secondary coil in "Butterball," to recharge battery pack of her implanted circulatory assist system. One of the visible tubes is used to challenge the ability of the "booster heart" system to assume complete function of heart's main pumping chamber—the left ventricle: air injected into the tube inflates a rubber cuff encircling the left main coronary artery to clamp shut this vital artery and thus simulate a heart attack. Other wires and tubes are used in monitoring calf's vital signs-blood pressures, flows, heart rate, etc.-and performance characteristics of assist system components.

ously reported "bench" and animal trials.

The "booster heart" systems and calves were shown to an advisory group of physicians and engineers, and scientists of Melpar, Inc., in Gaithersburg, Md.

Dr. Theodore Cooper, Director of NHI, welcomed the group, and stated, "The successful combination of components and their implantation in animals provides not only a unique opportunity to assess where we should go from here in this aspect of the AHP, but will also supply scientific keys of great value to our understanding of problems involved in developing systems for total heart replacement.'

Not Ready for Clinical Trials

Dr. Frank Hastings, chief of the AHP, emphasized that the systems are by no means ready for clinical trials in patients.

He explained that no special attempts were made to build longterm reliability into the components or in their miniaturization beyond that necessary for insertion into the 200-pound calves which have approximately the same circulatory requirements and heart size as adult humans.

In a film depicting the systems and their implantation, some of the components appeared about the size and shape of bricks.

Yet they were inserted easily by the surgeons into various recesses of the calf abdominal cavity.

The total weight of each system

Dr. Valega Is Appointed Scientist Administrator In Arthritis Institute

Dr. Thomas M. Valega has been appointed scientist administrator in the Office of the Director, National Institute of Arthritis and Metabolic Diseases. Dr. G. Donald Whedon, NIAMD Director, announced the appointment.

Dr. Valega will coordinate the research and development contracts for the Institute's Kidney-Chronic Uremia Program.

The program was initiated in 1965 with the aim of developing more efficient and economical artificial kidneys and dialysis treatments, and also improve methods of rehabilitating victims of kidney

Before joining NIAMD Dr. Valega was with the National Institute of Environmental Health Sciences where he administered research and training grants.

The researcher came to NIH in 1967 as a grants associate with the Division of Research Grants. Prior to that he was a chemist with the Department of Agriculture in the Pesticide Chemicals Research Branch, Entomology Research Division.

His projects included collaborating with entomologists on the screening and testing of compounds and the bioassay of natural extracts.

Dr. Valega received both his B.S. and Ph.D. degrees from Rutgers University.



Dr. Valega takes time out from serious research to seriously "birdwatch." He is an amateur ornithologist, a member of the National Audubon Society, and past president of the Montgomery Chapter of the Maryland Ornithological Society.

is about 51/2 pounds. Furthermore, the implanted systems have been functioning for up to 6 weeks.

Dr. Hastings said the systems were designed only to identify problem areas pertaining to the compatibility of various components with each other and with the body.

Nevertheless, he said, the attainment is a leap forward toward eventual clinical use.

Dr. William E. Bennett And Dr. Zora J. Griffo Join Grants Program

Two scientists have recently joined the Grants Associates Program for a year of training in administrative positions. They are Dr. William E. Bennett and Dr. Zora Jasincuk Griffo.

Dr. Bennett was formerly with the Pathology Division at Fort Detrick, Md., where he had been a research microbiologist since 1965. He was an NIH postdoctoral re-search fellow at Rockefeller University from 1963 until 1965.

From 1960 until 1963 he was an





Dr. Bennett

Dr. Griffo

instructor and later assistant professor of Microbiology at Meharry Medical College, and also a parttime instructor in the Department of Biology of Tennessee A and I State University.

Background Cited

Dr. Bennett received his B.A. in biology from Lincoln University in 1950, his M.S. in biology from Temple University in 1956, and his Ph.D. in medical microbiology from the University of Pennsylvania in

In 1968, he was a joint recipient of the LeRoy D. Fothergill RESA Award for Outstanding Research.

Dr. Bennett has written and also co-authored a number of papers in the field of cellular immunology with special concentration on the chemistry of inflammatory cells.

Dr. Griffo, a native of Prague. Czechoslovakia, studied medicine for one year at the UNRRA Medical School in Munich, Germany. She later taught at Teacher's Training College and at Commercial Economic Lyceum in Mittenwald, Germany, before she came to the United States in 1949.

Graduates Cum Laude

Dr. Griffo graduated cum laude with a B.S. degree in biology from St. Bonaventure University in 1952. She received her Ph.D. in physiology at the University of Buffalo in 1959.

From 1958 until 1961, Dr. Griffo was a research assistant at the Laboratory of Thoracic Physiology. Department of Surgery, Washington University School of Medicine.

Dr. Griffo has co-authored several papers on pulmonary vascular resistance and compliance.

10 Scientists From NIH to Participate In White House Conference Dec. 2 to 4

Nine NIH scientists are serving as consultants to the White House Conference on Food, Nutrition and Health. Another NIH staff member, Dr. Charles U. Lowe, will chair one of the 26 pre-conference advisory

The conference is being held Dec. 2-4 at the Sheraton-Park Hotel in Washington. It will seek to lead the way to a national nutrition policy. Top priority will be given to recommendations for action to end hunger and malnutrition.

More Than 2,500 to Participate

Dr. Jean Mayer, Special Consultant to the President, is in charge of the conference and has enlisted 475 of the nation's leading food and nutrition experts and other Americans to serve on the pre-conference panels.

More than 2,500 persons will participate in the full conference: educators; scientists; medical and health professionals; representatives of agriculture and the food industry; federal, state, and local government officials, and spokes-men for consumer and social-action groups.

Each of the 26 pre-conference panels is organized to consider a specific assignment. Consultants to these panels represent Government programs under scrutiny. They attend all meetings, have the same rights as members but they do not

As of Nov. 2, all but two of the panels had completed their work and were drafting preliminary recommendations on a wide range of food and nutrition problems.

Eight consumer-oriented, community-action task forces, includrepresentatives of the poor, will have an opportunity to study the recommendations and make suggestions of their own prior to the conference.

NIH participants include:

Dr. Charles U. Lowe, scientific

director, National Institute of Child Health and Human Development-Chairman, Panel on Pregnant and Nursing Women and In-

Dr. Heinz W. Berendes, chief, Perinatal Research Branch, National Institute of Neurological Diseases and Stroke-Consultant. Panel on Pregnant and Nursing Women and Infants.

Dr. William M. Moore, medical anthropologist, Growth and Development Branch, NICHD, and Dr. Merrill S. Read, Director, Growth and Development Branch, NICHD -Consultants to the Panel on Children and Adolescents.

Others From NIH Listed

Dr. Donald S. Frederickson, associate director of Intramural Research, National Heart Institute; Dr. Jerome G. Green, associate director for Extramural Programs, NHI; Dr. G. Donald Whedon, Director, National Institute of Arthritis and Metabolic Diseases-Consultant to the Panel on Adults in an Affluent Society.

Dr. Nathan W. Shock, associate director for Intramural Research (Gerontology), NICHD—Consultant, Panel on the Aging.

Dr. William J. Campbell, program administrator, Nutritional Sciences, Research Training Grants Branch, National Institute of General Medical Sciences, and Dr. Karl E. Mason, nutrition program di-Extramural Programs. NIAMD—Consultants to the Panel on Advanced Academic Teaching of Nutrition.



Walter Stroman (r) discusses highlights of the NIH Library's exhibit in Bldg. 10, entitled "Black Contributions to Biomedical Research," with Dr. William B. DeWitt, DRS Director, and Dr. Robert Q. Marston, NIH Director. Mr. Stroman was one of 19 committee members of the Library staff which developed the exhibit featuring the accomplishments of 27 black researchers. A bibliography of their selected writings is available. The exhibit will be shown through December.

Blood Bank at CC Reports On Donations in October

The Clinical Center Blood Bank reports that 250 units of blood were received from NIH donors in October, and CC patients received 1,468 units of blood.

One donor, Dr. Charles S. Richards, NIAID, joined the Gallon Donor Club.

Make an appointment to donate now. Call Ext. 64506.

Dr. Rauscher Appointed NCI's Acting Scientific Director for Etiology



For the past 5 years Dr. Rauscher has been a member of the Science-Management Team, NCI Virus-Cancer Program in addition to other duties.

Dr. Frank J. Rauscher, Jr. has been named acting scientific director for Etiology, National Cancer Institute. He succeeds Dr. Carl G. Baker, who was recently appointed Acting Director of the Institute.

For the present, Dr. Rauscher will also continue in his position as associate scientific director for Viral Oncology, NCI.

NCI's Etiology program includes research on the causes and prevention of cancer. Experimental and epidemiological research is conducted on potential and actual viral, chemical, and radiologic carcinogenic agents and combinations.

Joins NCI in 1959

Dr. Rauscher, a virologist, joined NCI in 1959. He was named head of the section of Viral Oncology in 1964, and chief of the Viral Leukemia and Lymphomas Branch in 1966.

Since 1964 he has also been a member of a Science-Management Team for the planning and implementation of the Institute's Special Virus-Cancer Program. In 1967 he became associate scientific director for Viral Oncology.

He graduated from Moravian College in 1953 and received his Ph.D. in microbiology from Rutgers University in 1957.

That Little Green Tree, Symbol of 'Davis Plan,' Makes Its Appearance



The symbol of giving, helping, caring is a sure sign that the Season of Good Will is right around the corner.

The little green tree, the desk ornament soon to be displayed in NIH offices, is a symbol of employee generosity. It is given to those who participate in the "Davis Plan," which helps support the NIH Patient Welfare Fund. (See NIH Record, Nov. 12, 1969.)

The Fund, maintained by voluntary contributions, provides assistance to patients and their families. The major source of income is given by the NIH Recreation & Wel-

NIAMD Sponsors Talks On Elementary Particles

The first in a series of three lectures at NIH on "Elementary Particles and Their Interactions" was delivered by Professor George Snow of the Department of Physics, University of Maryland, yesterday (Nov. 25).

Series Will Continue

Professor Snow will continue the series on alternate Tuesdays, Dec. 9 and Dec. 23, at 10:30 a.m. in Bldg. 31, Conference Room 6, on the 6th floor of the C Wing.

These lectures are sponsored by the National Institute of Arthritis and Metabolic Diseases to acquaint NIH staff members with recent developments in theoretical and experimental physics.

fare Association.

Examples of how funds are used are given in a leaflet—A Gift That Lasts Through the Year. Copies are available from the CC's Information Office.

Last year, James B. Davis, originator of the Davis Plan, arranged for the design of a symbol—a Christmas tree—which was given to employees contributing to the fund. The symbol will again be distributed.

Unit Administrative officers will present them to donators. Checks, made out to the NIH Patient Welfare Fund, will be accepted.

In India, Tents, Vans, Railway Platforms Used as Temporary Clinics for Vasectomies

In India, tents, school buildings, mobile vans and railway platforms were used to set up temporary clinics to perform vasectomies on people who live in remote villages without medical facilities.

Dr. D. N. Pai of Bombay, in relating the results his country has had with sterilization as a population control measure, stated that since 1956 more than 5 million vasectomies have been performed there.

Dr. Pai's report was given at a recent International Conference on Human Sterilization jointly sponsored by the Center for Population Research, National Institute of Child Health and Human Development, and the International Institute for the Study of Human Reproduction, Columbia University.

Participants included population experts from India, Korea, Japan, and South America.

Safe, reliable means of family planning through sterilization was stressed by conference participants because little of the physician's time is required in the procedure.

Assisting personnel can prepare the patient and also perform what little follow-up is required—an advantage over other methods of contraception, such as the IUD (intrauterine device) and the pill.

Although sterilization is often resisted because it is believed to be irreversible, studies show that tubal potency can be restored in a majority of cases and fertility restored in 50 percent of the cases by some surgeons.

Bioengineers at the conference demonstrated new techniques which might make sterilization procedures easier, render surgery unnecessary, or insure reversibility.

Techniques Discussed

Among the techniques discussed were ultrasound, lasers, microelectronics, telemetry, and occlusion with plastic materials.

The sessions were chaired by Dr. Denis Prager, acting chief of the Contraceptive Development Branch of the Center for Population Research, NICHD; Dr. Ralph Richart of the International Institute, and Dr. Sheldon Segal, director of the Bio-Medical Division of the Population Council.

Social and Economic Systems Stressed At FIC Conference-'Family in Transition'



Professor John Kantner (far left), discusses the changing function of the family with his colleagues at the recent FIC Roundtable Conference. Listening intently are (I to r): Dr. Valien, Dr. Milo D. Leavitt, Jr., FIC Director; Arthur Campbell, deputy director, Center for Population Research, NICHD; Dr. Lee-Jay Cho, Ford Foundation, Kuala Lumpur, Malaysia, and Katherine Oettinger, former head of the Children's Bureau.

Rapid changes during the past decades have had great impact on the growth of the population. Social and economic systems have changed both the functions of the family and the roles of the people that make

up a family. Such changes affect the number of births and its spacing.

A discussion on how and to what extent family and fertility patterns are changing was recently sponsored by the Fogarty International Center

Experts Attend

The 4-day Roundtable Conference on the Family in Transition, held at NIH early in November, brought together experts in sociology, demography, anthropology, and economics from the U.S. and foreign countries.

Dr. Preston Valien, acting associate commissioner for Higher Education, Office of Education, DHEW, was conference chairman.

He pointed out that no adequate substitute has been found to replace the emotional ties of the family, even though educational, recreational, and religious functions may have been transferred to other institutions.

Dr. Valien suggested that social as well as economic factors be considered when conducting research on the family and fertility.

Papers Cover Wide Range

Papers on themes pertinent to the conference covered a wide geographic range, such as "The Family in Transition in Latin America," "Mobility, Migration and Urbanization in India," and "The Family in Transition in Taiwan."

Also, "Ongoing and Future Transitions in Childbearing Patterns in the U.S.," and "The Shifting Balance of Familial and Non-Familial Roles in Japan."

Dr. Irene Taeuber, senior research demographer in the Office of Population Research, Princeton University, summarized the conclusions of the session.

GRACE

(Continued from Page 4)

tal of approximately 9 million characters or approximately 1,-800,000 five-letter words. GRACE processed the material in approximately 18 hours.

Dr. Martin M. Cummings, NLM Director, called that issue of *Index Medicus* "something of an historical document, because of its great significance to medicine, printing, and the library sciences." But as a prototype, GRACE was almost literally hand-made; by mid-1969 it was not economically feasible to maintain it in reliable operating condition.

A new production model PHO-TON ZIP 901 has replaced GRACE. The Smithsonian Institution has stated that it will be a significant addition to its collection.



Jessie M. Scott, Director, Division of Nursing, was inducted as a national honarary member of Sigma Theta Tau, National Honor Society of Nursing. She was cited for her consultations on health problems in India, and her concern with health needs and services in other foreign